

# SMaRT Station® Annual Report 2014-2015

## SMaRT Partners – Mountain View, Palo Alto and Sunnyvale



### Retrofits Lead to Unprecedented Diversion

As part of its 2015-2021 contract with Sunnyvale, Bay Counties Waste Services retrofitted new, advanced recycling and garbage sorting equipment to increase recovery of recyclable metal and plastic containers and compostable “2-inch minus fines” organics. As a result, the SMaRT Station's diversion reached record highs in May and June, 2015, as the facility shipped first 31 percent, then 35 percent, of incoming garbage to recycling and composting destinations, rather than the landfill.

The new Cirrus optical sorter, installed on the curbside line that handles 82 tons of curbside and other source-separated recyclables per day, has increased processing speeds and reduced manual sorting, allowing five workers to direct their sorting efforts elsewhere. New “disk screens” were added to separate plastic containers and metal cans from other materials in the garbage, enabling workers to easily see and pull these items from conveyor belts. The screens have also increased the amount of “fines” rich in organics, which are shipped to the Z-Best compost facility near Gilroy. There, Z-Best is using new post-composting processes and equipment to clean up the fines-derived compost to meet market standards.

The retrofitted equipment has produced record-breaking results. Of metal and plastic cans, bottles and other containers previously missed by the sorting process, 98.8 percent (metal) and 97.9 percent (plastic) are now captured. The amount of organics recovered for composting has increased by 65 percent.

Considering all flows of incoming materials to SMaRT, curbside and other source-separated recyclables and yard waste from the cities of Mountain View and Sunnyvale, facility-wide diversion hit new highs, topping out at 44 percent in May and 47 percent in June.



Cirrus optical sorter uses a high-resolution color sensor to sort plastic containers on the curbside sort line.



Portions of the roof were removed to install new disk screens that separate 2- and 3-dimensional materials and additional organic fines from garbage.



*Mike Sartor*  
**Mike Sartor**  
Public Works Director  
City of Palo Alto



*Michael A. Fuller*  
**Michael A. Fuller**  
Public Works Director  
City of Mountain View



*John Stufflebean*  
**John Stufflebean**  
Environmental Services Director  
City of Sunnyvale

# Costs, Revenues and Diversion 2014-2015

## Financial Summary of Costs and Revenues

	Mtn. View	Palo Alto	Sunnyvale	Totals
City Population	79,378	66,955	149,980	296,313
Cost Sharing Percentage	31%	18%	51%	
COSTS (in thousands)				
Operating costs	\$4,077	\$2,310	\$6,655	\$13,042
Landfill Fees and Taxes	\$2,920	\$2,164	\$5,635	\$10,719
Yardwaste Recycling costs	\$93	\$174	\$193	\$460
Capital Replacement Fund	\$46	\$41	\$108	\$195
Host Fees to General Fund	\$244	\$138	\$387	\$769
Total Costs	\$7,380	\$4,827	\$12,978	\$25,185
REVENUES (in thousands)				
MRF Recovered Recycling Revenues	\$59	\$33	\$96	\$188
Source Separated Recycling Revenues	\$566	\$0	\$774	\$1,340
Public Haul Fees collected	\$244	\$138	\$398	\$780
Total Revenues	\$869	\$171	\$1,268	\$2,308
NET COSTS (in thousands)	\$6,511	\$4,656	\$11,710	\$22,877

## SMaRT Station Diversion Summary

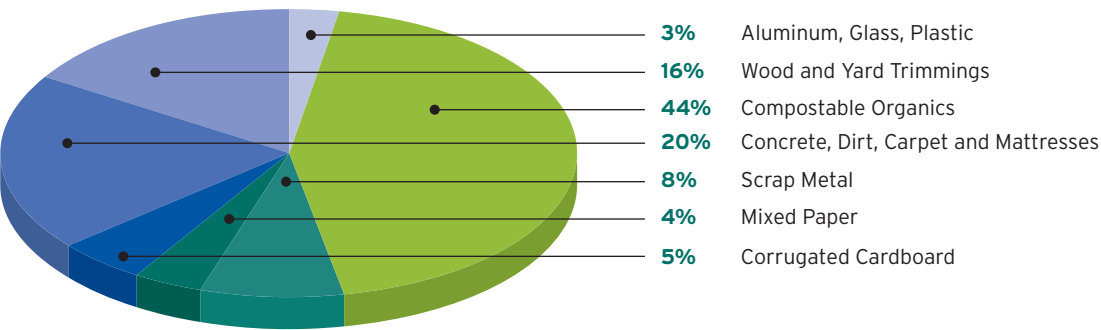
(in tons)	Mtn. View	Palo Alto	Sunnyvale	Totals
City Population	79,378	66,955	149,980	296,313
MSW* delivered to SMaRT Station	57,998	32,878	94,717	185,593
MSW Public haul	1,593	1,390	14,926	17,909
Total MSW Delivered to SMaRT	59,591	34,268	109,643	203,502
MSW disposed at landfill	46,865	26,874	85,914	159,653
MSW material diverted from the landfill at the SMaRT Station	12,726	7,394	23,729	43,849
Yard trimmings brought to SMaRT Station	6,536	12,223	13,578	32,337
Recyclables brought to SMaRT Station	10,196	0	11,922	22,118
Total Delivered	76,323	46,491	135,143	257,957
Total amount of material delivered to the SMaRT Station and diverted from the landfill	29,458	19,617	49,229	98,304

\* MSW = Municipal Solid Waste

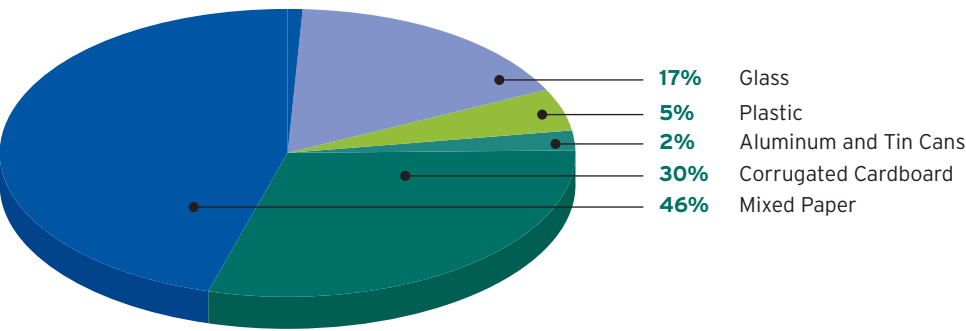
# Marketing Success

Percentages shown on these charts for diverted and marketed materials reflect material weight.

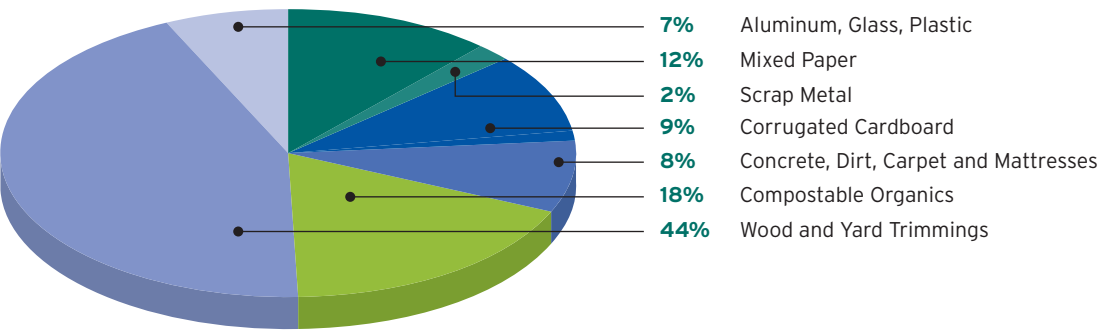
## Materials Diverted from MSW



## Materials Marketed from Curbside Collection



## SMaRT Station All Materials Marketed



## Partners in Leadership 2014-2015

### CITY OF SUNNYVALE

Mayor Jim Griffith  
Vice Mayor Jim Davis  
Councilmember Glenn Hendricks  
Councilmember Dave Whittum  
Councilmember Pat Meyering  
Councilmember Tara Martin-Milius  
Councilmember Gustav Larsson

City Manager Deanna J. Santana

### CITY OF PALO ALTO

Mayor Karen Holman  
Vice Mayor Greg Schmid  
Councilmember Patrick Burt  
Councilmember Eric Filseth  
Councilmember Tom DuBois  
Councilmember Liz Kniss  
Councilmember Gregory Scharff  
Councilmember Cory Wolbach  
Councilmember Mark Berman

City Manager James Keene

### CITY OF MOUNTAIN VIEW

Mayor John McAlister  
Vice Mayor Patricia Showalter  
Councilmember Christopher R. Clark  
Councilmember Ken Rosenberg  
Councilmember R. Michael Kasperzak, Jr.  
Councilmember Leonard M. Siegel  
Councilmember John M. Inks

City Manager Daniel H. Rich

# SMaRT Station Highlights

## Refinanced Debt Yields A SMaRT Payoff

Sunnyvale successfully refinanced the remaining balances owed on two solid waste revenue bonds that financed the construction and equipment purchases of the SMaRT Station. With favorable market conditions, the City retired a debt costing 4 to 5.5 percent interest, and locked in an interest rate of 1.23 percent for a balance of \$7.3 million. Along with reducing interest costs, this action consolidated two financings into one, which reduces the administrative work involved in servicing the debt and shortens the final maturity by one year. With other costs factored in, the action resulted in a present value savings of \$630,000 to the partner cities.

## SMaRT Revenues Remain Steady Despite Economic Downturn

Following its previous explosive economic growth, which produced a huge demand for raw materials, China's current economy has slowed – returning to more normal market conditions. With slower growth and the recent increased value of the US dollar compared to the Euro, Asian markets are purchasing raw materials from European suppliers at lower prices. Despite the obvious effect this may have on US markets, SMaRT Station revenues have been only modestly impacted by the economic downturn due to sound budgeting, quality materials and increased diversion.

Sunnyvale's 20-year budgeting system is designed to accommodate market fluctuations, which are common in the recycling business. The SMaRT Station's well-established reputation as a provider of high quality materials also sustains its relationships with recyclers during market fluctuations. Mountain View and Sunnyvale's dual stream curbside collection system – the separate collection of paper and containers – is a key element in maintaining quality recyclables. The recent installation of upgraded equipment fosters a more efficient sorting process, allowing Bay Counties SMaRT operators to extract 10 percent more recyclables initially disposed of as garbage which brings overall diversion to 35 percent.

SMaRT partners will continue the financial and operational strategies that have generated consistent revenues to ensure SMaRT's sustainable future in an ever changing marketplace.

## Stormwater Clean-up Project to Reduce Pollution

An improved SMaRT Station industrial storm water handling system is in the works as the City implements recommendations from a consultant feasibility study. The project will separate industrial storm water from rain falling on non-industrial parts of the facility – the roof, parking lots and landscaping. Industrial storm water will be piped to the adjacent Sunnyvale Water Pollution Control Plant for treatment. Design for the project is scheduled to begin in early 2016. After design and construction are complete, the new system is to be operational in the second half of 2018. During and after the project, Best Management Practices will continue to be used to keep both industrial and non-industrial storm water as clean as possible and to comply with new state permit requirements, which also require regular water sampling and analysis to verify standards are being met.